

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

LAMBDA OPTICAL SOLUTIONS LLC,

Plaintiff,

v.

ALCATEL-LUCENT USA INC. and
ALCATEL-LUCENT HOLDINGS INC.,

Defendants.

C.A. No. 10-487-RGA-CJB

DEMAND FOR JURY TRIAL

ALCATEL-LUCENT USA INC. and
ALCATEL-LUCENT HOLDINGS INC.,

Counter-Claimants,

v.

LAMBDA OPTICAL SOLUTIONS LLC,
LAMBDA OPTICAL SYSTEMS CORP., and
ANASTASIOS TZATHAS,

Counter-Defendants.

**DEFENDANTS ALCATEL-LUCENT USA INC. AND ALCATEL-LUCENT HOLDINGS
INC.'S FIRST AMENDED ANSWER, AFFIRMATIVE DEFENSES, AND
COUNTERCLAIMS**

Defendants Alcatel-Lucent USA Inc. and Alcatel-Lucent Holdings Inc. (collectively, “Alcatel-Lucent”) hereby submit this First Amended Answer, Affirmative Defenses, and Counterclaims to the Complaint for Patent Infringement of Plaintiff Lambda Optical Solutions LLC (“Lambda Solutions”). Alcatel-Lucent denies each and every allegation contained in the Complaint that is not expressly admitted below. Any factual allegation below is admitted only as to the specific admitted facts, not as to any purported conclusions, characterizations,

implications, or speculations that arguably follow from the admitted facts. Alcatel-Lucent denies that Lambda Solutions is entitled to the relief requested, or to any other relief.

ANSWER

Defendants Alcatel-Lucent answer Plaintiff Lambda Solutions' complaint as follows:

PARTIES

1. On information and belief, Alcatel-Lucent admits that Lambda Optical Solutions LLC is a Delaware Limited Liability Company with a principal place of business at 500 Newport Center Drive, 7th Floor, Newport Beach, CA 92660.

2. The originally named Defendant referred to by Lambda as "Alcatel-Lucent SA" is actually named "Alcatel Lucent", and is the ultimate French parent company of Alcatel-Lucent USA Inc. and Alcatel-Lucent Holdings Inc. Alcatel-Lucent admits that Alcatel Lucent is a company organized under the laws of France. Alcatel Lucent's principal place of business is at 3 avenue Octave Gréard, 75007 Paris, France. Alcatel Lucent is not subject to personal jurisdiction in this District, and has been dismissed from this litigation. The remaining allegations of Paragraph 1 are denied.

3. Admitted.

4. Admitted.

5. Denied. Alcatel-Lucent is unaware of the existence of any company called Alcatel-Lucent Marketing, Inc.

6. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 6.

7. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.

8. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 8.

9. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 9.

10. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 10.

11. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 11.

12. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 12.

13. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 13.

14. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 14.

15. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 15.

16. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 16.

17. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 17.

18. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 18.

19. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 19.

20. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 20.

21. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 21.

22. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 22.

23. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 23.

24. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 24.

25. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 25.

26. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 26.

27. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 27.

NATURE OF CLAIMS, JURISDICTION, AND VENUE

28. Paragraph 28 contains conclusions of law for which no response is required.

29. Alcatel-Lucent admits that Defendants Alcatel-Lucent USA Inc. and Alcatel-Lucent Holdings Inc. conduct business in the District of Delaware. Alcatel-Lucent denies all other allegations in Paragraph 29.

30. Paragraph 30 contains conclusions of law for which no response is required.

FIRST CAUSE OF ACTION

(Patent Infringement & Inducement to Infringe – U.S. Patent No. 6,973,229)

31. Alcatel-Lucent incorporates Paragraphs 1-30 of its First Amended Answer, Affirmative Defenses, and Counterclaims as if set forth fully herein.

32. Alcatel-Lucent admits that U.S. Patent No. 6,973,229 (“the ’229 patent”) issued on December 6, 2005. Alcatel-Lucent denies that the ’229 patent was duly and properly issued. Alcatel-Lucent further denies the remaining allegations of Paragraph 32.

33. Denied. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to whether a license exists under the ’229 patent. To the extent such a license exists, Alcatel-Lucent denies that it is valid or that it properly grants any rights to Lambda Solutions or any other entity, exclusive or otherwise.

34. Denied.

35. Alcatel-Lucent denies the allegations of Paragraph 35 as they pertain to Defendant Alcatel-Lucent Holdings Inc. Alcatel-Lucent admits that Alcatel-Lucent USA Inc. makes, uses, offers to sell, and/or sells the Alcatel 1696 Metrospan product. All remaining allegations of Paragraph 35 are denied.

36. Denied.

37. Alcatel-Lucent denies that Lambda Solutions has rights, exclusive or otherwise, in the invention of the ’229 patent. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 37.

38. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 38.

39. Alcatel-Lucent denies that Lambda Solutions has rights, exclusive or otherwise, in the invention of the '229 patent. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 39.

40. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 40.

41. Alcatel-Lucent denies that Lambda Solutions has rights, exclusive or otherwise, in the invention of the '229 patent. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 41.

42. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 42.

43. Alcatel-Lucent denies that Lambda Solutions has rights, exclusive or otherwise, in the invention of the '229 patent. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 43.

44. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 44.

45. Alcatel-Lucent denies that Lambda Solutions has rights, exclusive or otherwise, in the invention of the '229 patent. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 45.

46. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 46.

47. Alcatel-Lucent denies that Lambda Solutions has rights, exclusive or otherwise, in the invention of the '229 Patent. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 47.

48. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 48.

49. Alcatel-Lucent denies that Lambda Solutions has rights, exclusive or otherwise, in the invention of the '229 patent. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 49.

50. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 50.

51. Alcatel-Lucent denies that Lambda Solutions has rights, exclusive or otherwise, in the invention of the '229 patent. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 51.

52. Alcatel-Lucent is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 52.

53. Alcatel-Lucent denies any alleged infringement of the '229 patent, and denies that Lambda Solutions has suffered any harm due to any of Lambda Solutions' allegations. Alcatel-Lucent further denies that Lambda Solutions is entitled to any relief, monetary or otherwise.

FIRST AFFIRMATIVE DEFENSE

Lambda Solutions lacks standing to assert the '229 patent against Alcatel-Lucent because Lambda Solutions is not a proper licensee of the '229 patent. Alcatel-Lucent is the equitable owner of any intellectual property or inventions disclosed in the '229 patent, and has not licensed the technology to Lambda Solutions.

SECOND AFFIRMATIVE DEFENSE

Lambda Solutions is barred from bringing its claim for patent infringement by reason of unclean hands.

THIRD AFFIRMATIVE DEFENSE

Lambda Solutions is barred from bringing its claim for patent infringement by reason of laches and/or equitable estoppel.

FOURTH AFFIRMATIVE DEFENSE

Alcatel-Lucent has not infringed, induced infringement, or contributed to the infringement of any valid claim of the '229 patent, either literally or under the doctrine of equivalents.

FIFTH AFFIRMATIVE DEFENSE

Each of the claims of the '229 patent is invalid for failure to comply with the conditions for patentability of, *inter alia*, 35 U.S.C. §§ 101, 102, 103, and 112.

SIXTH AFFIRMATIVE DEFENSE

The '229 patent is unenforceable by reason of inequitable conduct during prosecution of the patent.

SEVENTH AFFIRMATIVE DEFENSE

Lambda Solutions is barred by 35 U.S.C. § 288 from recovering any costs associated with this suit.

EIGHTH AFFIRMATIVE DEFENSE

Lambda Solutions is barred from recovering damages under 35 U.S.C. § 287 by reason of the failure of Lambda Optical Systems Corp. and any of its licensees to mark products covered by the '229 patent with the patent number.

NINTH AFFIRMATIVE DEFENSE

To the extent Alcatel-Lucent's accused products have been used or manufactured by or for the United States, any and all remedies shall be had by action against the United States pursuant to 28 U.S.C. § 1498.

COUNTERCLAIMS

Without admitting any of the allegations in the Complaint other than those expressly admitted herein, and without prejudice to Alcatel-Lucent's right to plead additional counterclaims as the facts of the matter warrant, Alcatel-Lucent hereby asserts the following Counterclaims against Lambda Optical Solutions LLC, Lambda Optical Systems Corp. (and its predecessors), and Anastasios Tzathas:

1. Alcatel-Lucent USA Inc. is a Delaware Corporation having its principal place of business at 600 Mountain Ave., Murray Hill, NJ 07974.
2. Alcatel-Lucent Holdings Inc. is a Delaware Corporation having its principal place of business at 3400 W. Plano Parkway, Plano, TX 75075.
3. Lucent Technologies ("Lucent") is a predecessor company of Alcatel-Lucent USA Inc. Prior to the formation of Alcatel-Lucent USA Inc., Lucent Technologies was a Delaware corporation having its principal place of business at 600 Mountain Ave., Murray Hill, NJ 07974.
4. On information and belief, Lambda Optical Solutions LLC (previously defined as "Lambda Solutions") is a Delaware Limited Liability Company with a principal place of business at 500 Newport Center Drive, 7th Floor, Newport Beach, CA 92660.
5. On information and belief, Lambda Optical Systems Corp. ("Lambda Systems") is a Delaware Corporation with a principal place of business at 12100 Sunset Hills Road, Suite

100, Reston, VA 20190. Lambda Systems, and its predecessors in interest including Princeton Optical Systems, FirstWave Intelligent Optical Networks, Inc., FirstWave Secure Intelligent Optical Networks, Inc., and Maverick Acquisition Corp., were the originally named assignees on the '229 patent.

6. On information and belief, Anastasios Tzathas is an individual, currently residing at 11098 San Andrew Dr., New Market, MD 21774.

JURISDICTION AND VENUE

7. These counterclaims arise under the Federal Declaratory Judgment Act (28 U.S.C. §§ 2201 and 2202), the Patent Laws of the United States (35 U.S.C. § 100 *et seq.*), and the laws of the States of California and New Jersey.

8. This Court has jurisdiction over the subject matter of Alcatel-Lucent's counterclaims under 28 U.S.C. §§ 1332, 1338, 1367, and 2201.

9. This Court has personal jurisdiction over Counter-Defendants because Counter-Defendants are incorporated in this judicial district and/or because Counter-Defendants do business in this judicial district, have purposely availed themselves of the privileges and benefits of the laws of the State of Delaware, have directed continuous and systematic activities in this judicial district, and/or have, on information and belief, committed acts which have caused harm to companies incorporated in this judicial district. This Court also has personal jurisdiction over Counter-Defendants under Fed. R. Civ. P. 4(k).

10. Venue is proper in this Court under 28 U.S.C. §§ 1391(b-c) and 1400(b).

FIRST COUNTERCLAIM

Against Anastasios Tzathas for Breach of Contract

11. Alcatel-Lucent repeats and realleges the allegations contained in Paragraphs 1-10 of these Counterclaims as if set forth fully herein.

12. From February 17, 1997, through August 2, 2000, Mr. Tzathas was an employee at the Murray Hill, New Jersey, location of Lucent. Pursuant to the terms of his employment, Mr. Tzathas signed an Employee Agreement Regarding Intellectual Property (“the IP Agreement”) on February 17, 1997.

13. The IP Agreement is a binding and legally enforceable contract entered into by Mr. Tzathas and Lucent. The Agreement was supported by valuable consideration given by Lucent.

14. Lucent has met any and all of its obligations under the IP Agreement.

15. Under the terms of the IP Agreement, Mr. Tzathas, *inter alia*, assigned and agreed to assign, to Lucent all right, title, and interest in any inventions, discoveries, or other intellectual property developed wholly or partially by him: during the course of his employment at Lucent; or related to Lucent’s current or anticipated business or research; or using Lucent’s time or facilities. Further, under the terms of the IP agreement, Mr. Tzathas agreed to keep confidential any proprietary information he acquired during his employment.

16. During the period of his employment at Lucent, Mr. Tzathas participated, on Lucent’s behalf, in the Multiwavelength Optical Networking (“MONET”) Project, which lasted from December 1994 through November 1999. Pursuant to the terms of the IP Agreement signed by Mr. Tzathas and other Lucent employees at the time, any inventions, discoveries, or other intellectual property arising out of the participation of Lucent employees in the MONET

Project (or developed during the course of their employment at Lucent) became the property of Lucent, and is now the property of Alcatel-Lucent.

17. The Application that led to the '229 patent was filed on February 28, 2001. The '229 patent discloses inventions and discoveries made during the course of the MONET Project (and during the course of Mr. Tzathas' employment with Lucent) and which are therefore the property of Alcatel-Lucent.

18. By failing to assign to Lucent his right, title, and interest in the inventions, discoveries, or other intellectual property now contained in the '229 patent at the time such inventions, discoveries, or other intellectual property were developed and/or discovered, and by subsequently filing a patent application and being issued a patent covering these inventions, Mr. Tzathas breached the terms of the IP Agreement.

19. As a direct and proximate result of Mr. Tzathas' breach, Alcatel-Lucent has been deprived of its own beneficial ownership interest in the '229 patent, resulting in damages in an amount to be proved at trial. Additionally, because Mr. Tzathas was contractually obliged to assign his interest in the inventions, discoveries, or other intellectual property now contained in the '229 patent, and failed to do so, Alcatel-Lucent is entitled to restitution of any lost profits it would have earned arising out of its ownership of any inventions, discoveries, or other intellectual property contained in the '229 patent, and to specific performance under the IP Agreement, consisting of an order assigning to Alcatel-Lucent any right, title or interest now owned or previously held by Mr. Tzathas in the '229 patent.

SECOND COUNTERCLAIM

Against Anastasios Tzathas for Breach of the Implied Covenant of Good Faith and Fair Dealing Related to the IP Agreement

20. Alcatel-Lucent repeats and realleges the allegations contained in Paragraphs 1-19 of these Counterclaims as if set forth fully herein.

21. The February 17, 1997 IP Agreement is a binding and legally enforceable contract entered into by Mr. Tzathas and Lucent. The Agreement was supported by valuable consideration given by Lucent.

22. Lucent has met any and all of its obligations under the IP Agreement.

23. Mr. Tzathas has unfairly interfered with Lucent's (and now Alcatel-Lucent's) right to receive the benefits of the IP Agreement by, among other things, unfairly filing a patent application on inventions, discoveries, or other intellectual property covered by the IP Agreement and assigning his interest in that patent to Lambda Systems or its predecessor with the purpose of enabling Lambda Systems or its predecessor to enforce the patent against other companies including Alcatel-Lucent.

24. As a direct and proximate cause of Mr. Tzathas' breach of the implied covenant of good faith and fair dealing in the IP Agreement, Alcatel-Lucent has been damaged in an amount to be proved at trial.

25. Further, as a direct and proximate cause of Mr. Tzathas' breach of the implied covenant of good faith and fair dealing in the IP Agreement, Alcatel-Lucent has been divested of its interest in the inventions, discoveries, or other intellectual property which are the subject matter of the '229 patent, causing irreparable harm that will continue until such time as Alcatel-Lucent's interest has been restored.

THIRD COUNTERCLAIM

Against Anastasios Tzathas for Breach of Fiduciary Duty

26. Alcatel-Lucent repeats and realleges the allegations contained in Paragraphs 1-25 of these Counterclaims as if set forth fully herein.

27. From February 17, 1997, through August 2, 2000, Mr. Tzathas was an employee of Lucent. As an employee of Lucent, Mr. Tzathas owed Lucent a fiduciary duty.

28. Mr. Tzathas has breached his fiduciary duty by, among other things, unfairly filing a patent application on inventions, discoveries, or other intellectual property covered by the IP Agreement and assigning his interest in that patent to Lambda Systems or its predecessor to the financial detriment of Alcatel-Lucent.

29. As a direct and proximate cause of Mr. Tzathas' breach of his fiduciary duty, Alcatel-Lucent has been damaged in an amount to be proved at trial.

FOURTH COUNTERCLAIM

Against Anastasios Tzathas for Breach of Duty of Loyalty

30. Alcatel-Lucent repeats and realleges the allegations contained in Paragraphs 1-29 of these Counterclaims as if set forth fully herein.

31. From February 17, 1997, through August 2, 2000, Mr. Tzathas was an employee of Lucent. As an employee of Lucent, Mr. Tzathas owed Lucent a duty of loyalty.

32. Mr. Tzathas has breached his duty of loyalty to Lucent by, among other things, unfairly filing a patent application on inventions, discoveries, or other intellectual property covered by the IP Agreement and assigning his interest in that patent to Lambda Systems or its predecessor with the purpose of initiating an infringement action against Alcatel-Lucent on the same patent, effectively requiring Alcatel-Lucent to defend itself against claims that it infringed its own intellectual property.

33. As a direct and proximate cause of Mr. Tzathas' breach of his duty of loyalty, Alcatel-Lucent has been damaged in an amount to be proved at trial.

FIFTH COUNTERCLAIM

Against Lambda Optical Systems Corp. (and its predecessors) for Tortious Interference with Contractual Relations

34. Alcatel-Lucent repeats and realleges the allegations contained in Paragraphs 1-33 of these Counterclaims as if set forth fully herein.

35. From February 17, 1997, through August 2, 2000, Mr. Tzathas was an employee of Lucent. Mr. Tzathas breached the terms of the IP Agreement between himself and Lucent by failing to assign to Lucent his right, title, and interest in the inventions, discoveries, or other intellectual property now contained in the '229 patent at the time such inventions, discoveries, or other intellectual property were developed and/or discovered, by subsequently filing a patent application and being issued a patent covering these inventions, and by assigning his rights in that patent application to Lambda Systems or its predecessors.

36. On February 28, 2001, Mr. Tzathas filed Application No. 09/795,950 ("the '950 Application"), which would become the '229 patent, with the United States Patent and Trademark Office ("PTO").

37. On information and belief, Princeton Optical Systems, Inc., was, at or around the time period of the filing of the '950 Application, actively involved in the targeted hiring of key Lucent employees, including, but not limited to Mr. Tzathas.

38. On May 21, 2001, Mr. Tzathas assigned his interest in the '950 Application to Princeton Optical Systems, Inc., a predecessor to Lambda Systems. The assignment was recorded with the PTO on September 4, 2001.

39. On information and belief, Princeton Optical Systems, Inc., (now Lambda Systems) interfered with Lucent's contractual relationship with Mr. Tzathas by, among other things, inducing or otherwise contributing to Mr. Tzathas' breach of the IP Agreement, attempting to hire Mr. Tzathas away from Lucent, and/or accepting Mr. Tzathas' assignment of his interest in the '950 Application.

40. As a direct and proximate cause of this of this interference, Mr. Tzathas breached the IP Agreement with Lucent, causing damage to Alcatel-Lucent in an amount to be proved at trial.

SIXTH COUNTERCLAIM

Against Lambda Optical Solutions LLC, Lambda Optical Systems Corp. (and its predecessors), and Anastasios Tzathas for Misappropriation of Trade Secrets Under the Laws of the State of New Jersey

41. Alcatel-Lucent repeats and realleges the allegations contained in Paragraphs 1-40 of these Counterclaims as if set forth fully herein.

42. By filing this action, Lambda Solutions has indicated its belief that it possesses rights in the inventions, discoveries, or other intellectual property disclosed in the '229 patent.

43. As indicated below, Alcatel-Lucent believes that the '229 patent is anticipated by work and publications relating to the MONET Project on which Mr. Tzathas worked. Such publications include articles written about the MONET Project for which Mr. Tzathas was a co-author or a contributor.

44. To the extent the '229 patent contains any inventions, discoveries, or other intellectual property disclosed to or learned by Mr. Tzathas during the period of his employment at Lucent, and not contained in previously disclosed publications or other disclosures, including without limitation previously published articles about the MONET Project that Mr. Tzathas

either co-authored or contributed to, this information is, or was, a trade secret belonging to Alcatel-Lucent.

45. On information and belief, Mr. Tzathas misappropriated and misused Alcatel-Lucent trade secrets by disclosing the above-described information to Lambda Solutions, Lambda Systems, and to the public through the filing of a patent application that later issued as a patent.

46. Counter-Defendants' misappropriation has resulted in damages to Alcatel-Lucent in an amount to be proved at trial. Additionally, these actions have caused, and continue to cause, irreparable harm to Alcatel-Lucent for which Alcatel-Lucent has no adequate remedy at law. As a result, Mr. Tzathas should be enjoined from disclosing any further proprietary Alcatel-Lucent information to Lambda Solutions, Lambda Systems, or any other entity, and Counter-Defendants should be enjoined from any further use of misappropriated inventions, discoveries, or other intellectual property.

SEVENTH COUNTERCLAIM

Against Lambda Optical Solutions LLC, Lambda Optical Systems Corp. (and its predecessors), and Anastasios Tzathas for Tortious Interference with Actual and Prospective Business Relations

47. Alcatel-Lucent repeats and realleges the allegations contained in Paragraphs 1-46 of these Counterclaims as if set forth fully herein.

48. As part of its normal business operations, Alcatel-Lucent obtains patents relating to its business and licenses various segments of its patent portfolio. As a result, Alcatel-Lucent has actual and prospective business relations with customers. Alcatel-Lucent has benefited, and stands to further benefit economically from these relationships.

49. Among the patents licensed by Alcatel-Lucent are patents covering technology related to that of the '229 patent. If any valid and enforceable patent claim in the '229 patent had

been properly applied for, and were owned by Alcatel-Lucent, there is a reasonable certainty that it would be among the patents available for licensing by Alcatel-Lucent as part of its normal business operations.

50. On information and belief, Counter-Defendants are aware of Alcatel-Lucent's business practices and relationships because of Mr. Tzathas' prior employment at Lucent.

51. On information and belief, the acts of Counter-Defendants set forth above were and are intended to interfere with Alcatel-Lucent's actual and prospective business relations.

52. Counter-Defendants' interference has caused Alcatel-Lucent significant economic damage arising out of Alcatel-Lucent's inability to reap the economic rewards of its intellectual property, inventions, discoveries, or other intellectual property contained in the '229 patent, including the licensing thereof. This harm is continuing and will continue until the '229 patent is assigned to Alcatel-Lucent.

53. As a direct and proximate result of Counter-Defendants' interference, Alcatel-Lucent has been damaged in an amount to be proved at trial.

54. Counter-Defendants' interference has also caused irreparable harm to Alcatel-Lucent for which Alcatel-Lucent has no adequate remedy at law, and will continue to cause such harm unless enjoined by this Court.

EIGHTH COUNTERCLAIM

Against Lambda Optical Solutions LLC, Lambda Optical Systems Corp. (and its predecessors), and Anastasios Tzathas for Unfair Competition Under Cal. Bus. & Prof. Code § 17200 and the Laws of the State of New Jersey

55. Alcatel-Lucent repeats and realleges the allegations contained in Paragraphs 1-54 of these Counterclaims as if set forth fully herein.

56. The above-described acts, omissions, and failures of Lambda Solutions, Lambda Systems, and Mr. Tzathas constitute unfair, unlawful, and deceptive business practices, in

violation of Cal. Bus. & Prof. Code. § 17200 *et seq*, and in violation of the common law of the State of New Jersey. This conduct includes, without limitation, Counter-Defendants' wrongful assertion of rights to the inventions disclosed in the '229 patent.

57. As a result of Counter-Defendants' conduct, Counter-Defendants have been or will be unjustly enriched in an amount to be proved at trial, and for which Alcatel-Lucent seeks restitution.

58. Additionally, Counter-Defendants' continued improper assertion of rights to the inventions disclosed in the '229 patent and the resulting assertion of infringement of that patent against Alcatel-Lucent have caused, and continue to cause irreparable harm to Alcatel-Lucent for which Alcatel-Lucent has no adequate remedy at law. As a result, Lambda Solutions should be enjoined from prosecuting its infringement claim against Alcatel-Lucent at least until the issue of ownership of the '229 patent is resolved.

NINTH COUNTERCLAIM

Against Lambda Optical Solutions LLC and Lambda Optical Systems Corp. for Declaratory Judgment of Non-Infringement of U.S. Patent No. 6,973,229

59. Alcatel-Lucent repeats and realleges the allegations contained in Paragraphs 1-58 of these Counterclaims as if set forth fully herein.

60. Alcatel-Lucent has not infringed, induced infringement, or contributed to the infringement of any valid claim of the '229 patent, either literally or under the doctrine of equivalents.

TENTH COUNTERCLAIM

Against Lambda Optical Solutions LLC and Lambda Optical Systems Corp. for Declaratory Judgment of Invalidity of U.S. Patent No. 6,973,229

61. Alcatel-Lucent repeats and realleges the allegations contained in Paragraphs 1-60 of these Counterclaims as if set forth fully herein.

62. Each of the claims of the '229 patent is invalid for failure to comply with the conditions for patentability of, *inter alia*, 35 U.S.C. §§ 101, 102, 103, and 112.

ELEVENTH COUNTERCLAIM

Against Lambda Optical Solutions LLC and Lambda Optical Systems Corp. for Laches and/or Equitable Estoppel

63. Alcatel-Lucent repeats and realleges the allegations contained in Paragraphs 1-62 of these Counterclaims as if set forth fully herein.

64. Lambda Solutions has accused at least five Alcatel-Lucent products of infringing the '229 patent. The Alcatel-Lucent 1625 LambdaXtreme Transport product was first launched by 2002. The Alcatel-Lucent 1675 LambdaUnite Multiservice Switch product was first launched by 2001. The Alcatel-Lucent 1695 Wavelength Services Manager product was first launched by 2004. The Alcatel-Lucent 1696 Metrospan Metro-WDM product was first launched by 2002. The Alcatel-Lucent 1696 Metrospan ROADM product was first launched by 2002.

65. On information and belief, Counter-Defendants and any other predecessor in interest to the '229 patent knew or should have known about the accused products since their first launches. By unjustifiably waiting up to nearly nine years from its first awareness of the accused products, and nearly five years from the date of issue of the '229 patent, Lambda Solutions' requested relief is barred by the doctrines of laches and/or equitable estoppel.

TWELFTH COUNTERCLAIM

Against Lambda Optical Solutions LLC, Lambda Optical Systems Corp. (and its predecessors), and Anastasios Tzathas for Inequitable Conduct During Prosecution of U.S. Patent No. 6,973,229

66. Alcatel-Lucent repeats and realleges the allegations contained in Paragraphs 1-65 of these Counterclaims as if set forth fully herein.

67. From February 17, 1997, through August 2, 2000, Mr. Tzathas was an employee of Lucent. During the period of his employment at Lucent, Mr. Tzathas participated, on Lucent's behalf, and along with other Lucent employees, in the Multiwavelength Optical Networking ("MONET") Project, which lasted from December 1994 through November 1999.

68. The Application that led to the '229 patent was filed on February 28, 2001. Prior to this time, there were numerous published articles detailing the MONET project. Mr. Tzathas co-authored at least one article detailing the MONET Project, and was acknowledged as a contributor on another. Neither the MONET Project itself, Mr. Tzathas' participation in the MONET Project, nor his authorship of and contribution to publications was disclosed to the PTO during prosecution of the application that led to the '229 patent, despite there having been three separate Information Disclosure Statements provided to the PTO to assist the Examiner.

69. Numerous references describing the MONET project were not disclosed to the PTO during prosecution of the '229 patent. For example, Anderson, William T. et al., *The MONET Project – A Final Report*, 18 J. Lightwave Tech. 12 (Dec. 2000), on which Mr. Tzathas is a named author, was not disclosed to the PTO. Johnson, Steven R., *Advanced Optical Networking – Lucent's MONET Network Elements*, Bell Labs Tech J. (Jan. – Mar. 1999), describing the MONET project on which Mr. Tzathas worked, and acknowledging Mr. Tzathas as a contributor was also not disclosed to the PTO. Further, Richards, D. et al, *Optical Simulations for Experimental Networks: Lessons from MONET*, Invited Paper, 3843 SPIE Conf. on All-Optical Networking, Boston, MA (Sep. 1999), describing the MONET project, on which Mr. Tzathas worked and with which he was familiar, was not disclosed to the PTO.

70. On information and belief, the undisclosed information above consists of invalidating prior art and/or inventorship contributions by others to the '229 claims, and would

have been material to the patentability of the '229 patent. At least Mr. Tzathas was aware of the existence of the information, and of its materiality to the patentability of the '229 patent, and he withheld this information from the PTO with intent to deceive or mislead. As a result of Mr. Tzathas' withholding, and consistent with his deceptive intent, the '229 patent was allowed to issue.

71. As additional grounds for inequitable conduct, Lambda Solutions, Lambda Systems, or their patent agents or attorneys made statements to the PTO during reexamination of the '229 patent that were untrue, misleading, and/or inconsistent with statements later made before this Court during the parties' claim construction briefing.

72. During the course of this litigation, the '229 patent entered reexamination before the PTO, assigned reexamination Control No. 90/009,864.

73. During the reexamination, claims 1-26 of the '229 patent were rejected over the referenced prior art, which included references describing and relating to the MONET project, described above.

74. In order to overcome this rejection, Lambda Solutions, Lambda Systems, or their patent agents or attorneys attempted to distinguish the invention of the '229 patent from the MONET project, claiming that the invention of the '229 patent was capable of interfacing with "access networks" -- specifically, that it had the capability to egress signals directly from the optical switching system to non-ITU-compliant networks.

75. In so arguing, Lambda Solutions, Lambda Systems, or their patent agents or attorneys identified the ability of the optical switching system of the '229 patent to egress signals to non-ITU-compliant networks as a defining element of the capability of interfacing with "access networks."

76. Lambda Solutions, Lambda Systems, or their patent agents or attorneys asserted the MONET project possessed no such capability, a claim that Alcatel-Lucent believes is contradicted by published articles describing the MONET project.

77. Additionally, Lambda Solutions, Lambda Systems, or their patent agents or attorneys made statements regarding the MONET project that were untrue, misleading, and/or inconsistent with statements later made before this Court during the parties' claim construction briefing. For example, Lambda Solutions, Lambda Systems, or their respective patent agents or attorneys made the following statements in the June 28, 2011 Remarks during reexamination:

- "The MONET project did not attempt to address any problems related to the use of access networks, i.e., non-compliant networks, such as Gigabit Ethernet or SONET networks."
- "The MONET Project did not address how to get the data into or out of the network."
- "[N]o access networks were ever tested or connected to the optical network of the MONET Project."

June 28, 2011 Response to Reexamination Office Action at 15.

78. These statements are contradicted by publications describing the MONET project. For example, the following quotes from publicly available articles establish that the MONET project did address, test, and connect to access networks, including those that carry non-compliant signals:

- "The WADM allows full optical add/drop...compatible with both compliant and noncompliant (wavelength-regenerated) interfaces." L. D. Garrett et al., *The MONET New Jersey Network Demonstration*, 16 IEEE J. SELECTED AREAS IN COMM. 1199, 1207 (1998) [hereinafter Garrett].
- "The network supports eight wavelengths on a 200-GHz grid, allowing for full mesh connectivity at the optical layer between the six agencies [Naval Research Laboratory, NASA, NSA, DARPA, Defense Information Systems, and Defense Intelligence Agency]. Both types of network elements provide for both compliant (i.e., at the right wavelength and power level and noncompliant (i.e. sources which require adaption) inputs." William T.

Anderson et al., *The MONET Project – A Final Report*, 18 J. Lightwave Tech. 1988, 1990 (2000).

- “The MONET New Jersey optical networking demonstration described in this paper involves the characterization of the physical performance of the three linked testbeds and the demonstration of connection setup across the domain boundary between the local exchange and the long-distance NC&M systems.” Garrett at 1199.

79. Additionally, Lambda Solutions, Lambda Systems, or their patent agents or attorneys made statements to the PTO during reexamination suggesting that the “access network” of the ’229 patent was limited to SONET or Gigabit Ethernet signaling:

- “The claimed access network is a network that provides an optical signal to the optical transport switching system for use in an optical network, where the optical signal is SONET or Gigabit Ethernet.”

June 28, 2011 Response to Reexamination Office Action at 16.

80. Alcatel-Lucent believes this is contradicted by the language of the ’229 patent itself, which states that:

- “The all-optical switch can be used in an optical network that allows external/access networks to access the optical network, **including** access networks that use Gigabit Ethernet or SONET signaling.” ’229 patent at Abstract (emphasis added).
- “It is an object of this invention to provide an all-optical switch for use in an optical network that interfaces with access networks, including Gigabit Ethernet over fiber networks, SONET OC-n networks, **and others.**” ’229 patent at column 1, lines 38-42 (emphasis added).

81. The language of the ’229 patent, therefore, describes the access networks, not as being limited to SONET or Gigabit Ethernet signaling, but as merely including such signaling.

82. In view of the above statements about MONET that Alcatel-Lucent believes directly contradict the statements about MONET made to the PTO during reexamination of the ’229 patent, Alcatel-Lucent believes that Lambda Solutions, Lambda Systems, or their patent

agents or attorneys made knowingly false statements about MONET to the PTO in an attempt to deceive the PTO and secure the continued validity of the '229 patent.

83. Alcatel-Lucent's belief is also supported by Lambda Solutions and Lambda Systems' statements to this Court made during claim construction briefing in this matter. There, Lambda Solutions and Lambda Systems adopted a different meaning of "access networks" than they had recently taken before the PTO during reexamination of the '229 patent.

84. Before this Court, Lambda Solutions and Lambda Systems stated that "[t]he parties agree that 'access network' means 'a network external to the optical network.'" Lambda Opening Claim Construction Brief at 2 n.1. The parties did in fact agree to this definition and submit it as a joint construction to the Court. Alcatel-Lucent here reaffirms its agreement.

85. This definition of "access network," however, includes "access networks" which use only compliant wavelengths. Under this definition, therefore, the optical switching system of the '229 patent could interface with "access networks" without the capability of egressing non-ITU-compliant wavelengths. This definition is also not limited to SONET or Gigabit Ethernet signaling. This contradicts the statements Lambda Solutions, Lambda Systems, or their patent agents or attorneys made to the PTO during reexamination, which characterized the ability to egress signals to non-ITU-compliant networks as a defining element of the capability of interfacing with "access networks" and limited "access networks" to SONET or Gigabit Ethernet signaling.

86. If Lambda Solutions, Lambda Systems, or their patent agents or attorneys had defined "access network" as "a network external to the optical network" to the PTO during reexamination, they would have been unable to overcome the rejection of claims 1-26 of the '229 patent.

87. Alcatel-Lucent believes that the correct definition of “access network” is the one Lambda Solutions and Lambda Systems agreed to in statements before this Court. Alcatel-Lucent also believes, therefore, that Lambda Solutions and Lambda Systems’ prior assertions to the PTO were untrue or misleading, and were made with the intent to deceive the PTO and secure the continued validity of certain claims of the ’229 patent.

88. As a result of the actions described in paragraphs 66-70, Mr. Tzathas, Lambda Systems, and/or those involved in prosecuting the application leading to the issuance of the ’229 patent have committed inequitable conduct before the PTO. And, as a result of the actions described in paragraphs 71-87, Lambda Solutions, Lambda Systems, and/or their patent agents or attorneys have also committed inequitable conduct before the PTO during reexamination of the ’229 patent. As a result of this inequitable conduct, the claims of the ’229 patent are unenforceable, and the Counter-Defendants are subject to whatever additional penalty this Court, and the PTO, should deem appropriate.

THIRTEENTH COUNTERCLAIM

Against Lambda Optical Solutions LLC for Attorneys Fees Under 35 U.S.C. § 285

89. Alcatel-Lucent repeats and realleges the allegations contained in Paragraphs 1-88 of these Counterclaims as if set forth fully herein.

90. Subsequent to Lambda Solutions’ filing of its Complaint, Alcatel-Lucent contacted Lambda Solutions, who purportedly obtained a license to the ’229 patent from Lambda Systems, and disclosed to Lambda Solutions at least the *Anderson* and *Johnson* references described above in Paragraph 69 which anticipate the claims of the ’229 patent under 35 U.S.C. § 102. Alcatel-Lucent also informed Lambda Solutions that Alcatel-Lucent is the equitable owner of the inventions disclosed in the ’229 patent.

91. For having persisted in this action based on an invalid and unenforceable patent that Lambda Systems does not even properly own, in spite of the above information having been provided to Lambda Solutions by Alcatel-Lucent, Lambda Solutions is liable under 35 U.S.C. § 285, making this case exceptional and Alcatel-Lucent seeks recovery of its attorney fees under that statute as part of this counterclaim.

FOURTEENTH COUNTERCLAIM

Against Lambda Optical Solutions LLC, Lambda Optical Systems Corp. (and its predecessors), and Anastasios Tzathas for Conversion

92. Alcatel-Lucent repeats and realleges the allegations contained in Paragraphs 1-91 of these Counterclaims as if set forth fully herein.

93. By virtue of the filing of this action, Lambda Solutions and Lambda Systems has indicated their belief that they possess rights in the inventions, discoveries, or other intellectual property disclosed in the '229 patent.

94. As indicated above, Alcatel-Lucent believes that it is the rightful owner of the alleged inventions claimed in the '229 patent, and of the '229 patent itself. The basis for this belief is that, on information and belief, the alleged inventions of the '229 patent are based on work and publications relating to the MONET Project on which Mr. Tzathas worked. Such publications include articles written about the MONET Project for which Mr. Tzathas was a co-author or a contributor.

95. To the extent the '229 patent contains any inventions, discoveries, or other intellectual property developed, disclosed to, or learned by Mr. Tzathas during the period of his employment at Lucent, and not contained in previously disclosed publications or other disclosures, including without limitation previously published articles about the MONET Project

that Mr. Tzathas either co-authored or contributed to, this proprietary information, including all documents and things memorializing this information, belong to Alcatel-Lucent.

96. On information and belief, all Counter-Defendants have engaged, and Lambda Solutions and Lambda Systems continue to engage, in a wrongful exercise of dominion over this information which is rightfully the property of Alcatel-Lucent, and, based on Lambda Solutions and Lambda Systems' actions in this case, on information and belief, their intention is to continue to deprive Alcatel-Lucent of the beneficial use of Alcatel-Lucent's proprietary information and the alleged inventions.

97. The Counter-Defendants' conversion has resulted in damages to Alcatel-Lucent in an amount to be proved at trial. Additionally, these actions have caused, and continue to cause, irreparable harm to Alcatel-Lucent for which Alcatel-Lucent has no adequate remedy at law. As a result, the Counter-Defendants should be enjoined from any further use of misappropriated inventions, discoveries, or other intellectual property, and should be required to compensate Alcatel-Lucent for the loss of the beneficial use of its property.

FIFTEENTH COUNTERCLAIM

Against Lambda Optical Systems Corp. (and its predecessors) for Aiding and Abetting a Breach of Fiduciary Duty

98. Alcatel-Lucent repeats and realleges the allegations contained in Paragraphs 1-97 of these Counterclaims as if set forth fully herein.

99. From February 17, 1997, through August 2, 2000, Mr. Tzathas was an employee of Lucent. As an employee of Lucent, Mr. Tzathas owed Lucent a fiduciary duty and a duty of loyalty.

100. Mr. Tzathas has breached his fiduciary duty and his duty of loyalty to Lucent by, among other things, unfairly filing a patent application on inventions, discoveries, or other

intellectual property covered by the IP Agreement and assigning his interest in that patent to Lambda Systems or its predecessor to the financial detriment of Alcatel-Lucent.

101. On February 28, 2001, Mr. Tzathas filed the '950 Application, which would become the '229 patent, with the PTO.

102. On information and belief, Princeton Optical Systems, Inc., was, at or around the time period of the filing of the '950 Application, actively involved in the targeted hiring of key Lucent employees, including, but not limited to Mr. Tzathas.

103. On May 21, 2001, Mr. Tzathas assigned his interest in the '950 Application to Princeton Optical Systems, Inc., a predecessor to Lambda Systems. The assignment was recorded with the PTO on September 4, 2001.

104. On information and belief, Lambda Systems induced or knowingly participated in a breach of Mr. Tzathas' fiduciary duty and duty of loyalty by, among other things, inducing or otherwise contributing to Mr. Tzathas' breach of the IP Agreement, attempting to hire Mr. Tzathas away from Lucent, accepting Mr. Tzathas' assignment of his interest in the '950 Application, and/or continuing to engage in a wrongful exercise of dominion over information which is rightfully the property of Alcatel-Lucent.

105. As a direct and proximate cause of this conduct, Mr. Tzathas breached his fiduciary duty and his duty of loyalty to Lucent, causing damage to Alcatel-Lucent in an amount to be proved at trial.

PRAYER FOR RELIEF

Wherefore, Alcatel-Lucent respectfully requests that the Court grant the following relief:

- (a) a declaration that Lambda Solutions is not entitled to any of its requested relief and that Lambda Solutions' complaint is dismissed with prejudice and costs;
- (b) a declaration that Alcatel-Lucent does not infringe any valid claim of the '229 patent and that Alcatel-Lucent is not liable for inducing or contributing to the infringement of any valid claim of the '229 patent;
- (c) a declaration that the claims of the '229 patent are invalid;
- (d) a declaration that Lambda Solutions' claims are barred by laches;
- (e) a declaration that Lambda Solutions' claims are barred by unclean hands;
- (f) a declaration that the '229 patent is unenforceable due to inequitable conduct during prosecution;
- (g) a declaration that Lambda Solutions is barred from recovery by reason of its predecessors' failure to mark their products with the '229 patent;
- (h) an order assigning all right, title, and interest of Lambda Solutions, Lambda Systems, or Mr. Tzathas (or any predecessor in interest) to the '229 patent to Alcatel-Lucent;
- (i) a declaration of a constructive trust over the '229 patent in favor of Alcatel-Lucent;
- (j) an injunction against any further disclosure or use of misappropriated Alcatel-Lucent trade secrets by Lambda Solutions, Lambda Systems, or Mr. Tzathas;

- (k) a disgorgement of any profits of Lambda Solutions, Lambda Systems, or Mr. Tzathas derived from their improper use of the '229 patent, including any awards received by asserting the '229 patent in prior infringement actions and this infringement action;
- (l) a declaration that this case is exceptional;
- (m) an award of costs and attorney fees to Alcatel-Lucent;
- (n) punitive damages in an amount to be decided by this Court;
- (o) such other and further relief as this Court may deem just and proper.

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